

AMENDMENTS IN THE CLAIMS

Claim amendments and status:

1. (Currently Amended) An enhanced mechanical reel gaming system utilizing a touch panel as a user control device for mechanical reel assemblies and game play features, the system comprising:

a gaming machine assembly utilizing mechanical reels as display devices;

a touch sensor assembly utilizing a substantially transparent touch panel that produces touch data when activated, and wherein the touch panel provides viewing of the mechanical reels through the touch panel;

a reel-compatible touch panel controller that registers and interprets the touch data from the touch panel in real time, wherein the reel-compatible touch panel controller registers the touch data in real time and operates at a level that is sufficient to support mechanical reel control; and

touch panel reel software that interprets and utilizes the touch data received from the touch panel controller in real time and operates at a level that is sufficient to support mechanical reel control, and

wherein the touch panel reel software communicates the touch data to a reel controller that manipulates the mechanical reels in accordance with the touch data received, and

wherein the touch panel enables user-control of reel spin direction and reel spin speed in correspondence with the direction and speed in which the touch panel is touched by a user.

2. (Original) The system of Claim 1, wherein the gaming machine assembly comprises a reel spinning game machine having at least one reel.

3. (Previously Presented) The system of Claim 2, wherein the system enables selectively starting and stopping the reels by touching the touch panel at a particular point.

4. (Previously Presented) The system of Claim 2, wherein the system enables activating different game features by using distinct types, directions, and durations of touches.

5. (Previously Presented) The system of Claim 2, wherein the system enables selectively activating features and system controls by touching the touch panel at particular points.

6. (Original) The system of Claim 1, wherein the substantially transparent touch panel is composed of a composite material.
7. (Original) The system of Claim 6, wherein the composite material touch panel comprises a glass material touch panel.
8. (Original) The system of Claim 1, wherein the substantially transparent touch panel is composed of a metallic material.
9. (Original) The system of Claim 1, wherein the touch panel includes a polymeric film.
10. (Original) The system of Claim 1, wherein the touch sensor assembly includes a plurality of transducers that are integrated into the touch panel.
11. (Original) The system of Claim 10, wherein the transducers are selected from a group consisting of acoustic transducers, infrared transducers, ultrasonic transducers, resistive transducers, and capacitive transducers.
12. (Original) The system of Claim 10, further comprising a bezel to protect the transducers.
13. (Original) The system of Claim 1, further comprising a generic device controller unit operatively associated with a reel assembly for controlling the reel assembly.
14. (Original) The system of Claim 13, wherein the generic device controller unit runs reel controller firmware.
15. (Original) The system of Claim 13, further comprising a microprocessor connected to the generic device controller unit.
16. (Original) The system of Claim 1, wherein touch panel software includes driver software.
17. (Original) The system of Claim 1, wherein the driver software is capable of controlling and interpreting data from the touch panel controller.

18. (Original) The system of Claim 1, wherein the touch panel software includes application software.

19. (Original) The system of Claim 18, wherein a microprocessor runs the application software.

20. (Original) The system of Claim 1, further comprising a multi-tasking embedded control system which controls both periphery devices and application software.

21. (Currently Amended) An enhanced mechanical reel gaming system utilizing multiple touch panels as user control devices for mechanical reel assemblies and game play features, the system comprising:

a control panel assembly;

a plurality of touch sensor assemblies utilizing substantially transparent touch panels that produce touch data when activated, and wherein the touch panels provide viewing of the mechanical reel assemblies through the touch panels;

at least one reel-compatible touch panel controller that registers and interprets the touch data from the touch panel, wherein the reel-compatible touch panel controller registers the touch data at a level sufficient to support mechanical reel control; ~~and~~

touch panel reel software that interprets and utilizes the touch data received from the touch panel controller at a level sufficient to support mechanical reel control, and wherein the touch panel reel software communicates the touch data to a reel controller that manipulates the mechanical reels in accordance with the touch data received, and

wherein the touch panel enables user-control of reel spin direction and reel spin speed in correspondence with the direction and speed in which the touch panel is touched by a user.

22. (Currently Amended) An enhanced mechanical reel gaming kit for modifying an existing reel gaming machine assembly, the kit utilizing a touch panel as a user control device for mechanical reel assemblies and game play features, the kit comprising:

a touch sensor assembly utilizing a substantially transparent touch panel that produces touch data when activated, and wherein the touch panel provides viewing of the mechanical reels through the touch panel;

a reel-compatible touch panel controller that registers and interprets the touch data from the touch panel, wherein the reel-compatible touch panel controller registers the touch data at a level sufficient to support mechanical reel control; ~~and~~

touch panel reel software that interprets and utilizes the touch data received from the touch panel controller at a level sufficient to support mechanical reel control, and wherein the touch panel reel software communicates the touch data to a reel controller that manipulates the mechanical reels in accordance with the touch data received, and

wherein the touch panel enables user-control of reel spin direction and reel spin speed in correspondence with the direction and speed in which the touch panel is touched by a user.

23. (Original) The system of Claim 22, wherein the gaming machine assembly comprises a reel spinning game machine having at least one reel.

24. (Previously Presented) The system of Claim 23, wherein the system enables selectively starting and stopping the reels by touching the touch panel at a particular point.

25. (Previously Presented) The system of Claim 23, wherein the system enables activating different game features by using distinct types, directions, and durations of touches.

26. (Previously Presented) The system of Claim 23, wherein the system enables selectively activating features and system controls by touching the touch panel at particular points.

27. (Original) The system of Claim 22, wherein the substantially transparent touch panel is composed of a composite material.

28. (Original) The system of Claim 27, wherein the composite material touch panel comprises a glass material touch panel.

29. (Original) The system of Claim 22, wherein the substantially transparent touch panel is composed of a metallic material.

30. (Original) The system of Claim 22, wherein the touch panel includes a polymeric film.

31. (Original) The system of Claim 22, wherein the touch sensor assembly includes a plurality of transducers that are integrated into the touch panel.

32. (Original) The system of Claim 31, wherein the transducers are selected from a group consisting of acoustic transducers, infrared transducers, ultrasonic transducers, resistive transducers, and capacitive transducers.

33. (Original) The system of Claim 31, further comprising a bezel to protect the transducers.

34. (Original) The system of Claim 22, further comprising a generic device controller unit operatively associated with a reel assembly for controlling the reel assembly.

35. (Original) The system of Claim 34, wherein the generic device controller unit runs reel controller firmware.

36. (Original) The system of Claim 34, further comprising a microprocessor connected to the generic device controller unit.

37. (Original) The system of Claim 22, wherein touch panel software includes driver software.

38. (Original) The system of Claim 22, wherein the driver software is capable of controlling and interpreting data from the touch panel controller.

39. (Original) The system of Claim 22, wherein the touch panel software includes application software.

40. (Original) The system of Claim 39, wherein a microprocessor runs the application software.

41. (Original) The system of Claim 22, further comprising a multi-tasking embedded control system which controls both periphery devices and application software.

42. (Currently Amended) An enhanced mechanical reel gaming kit for modifying an existing reel gaming machine assembly, the kit utilizing multiple touch panels as user control devices for mechanical reel assemblies and game play features, the kit comprising:

a plurality of touch sensor assemblies utilizing substantially transparent touch panels that produce touch data when activated, and wherein the touch panels provides viewing of the mechanical reel assemblies through the touch panels;

at least one reel-compatible touch panel controller that registers and interprets the touch data from the touch panel, wherein the reel-compatible touch panel controller registers the touch data at a level sufficient to support mechanical reel control; ~~and~~

touch panel reel software that interprets and utilizes the touch data received from the touch panel controller at a level sufficient to support mechanical reel control, and wherein the touch panel reel software communicates the touch data to a reel controller that manipulates the mechanical reels in accordance with the touch data received, and

wherein the touch panel enables user-control of reel spin direction and reel spin speed in correspondence with the direction and speed in which the touch panel is touched by a user.

43. (Currently Amended) A process for enabling enhanced mechanical reel gaming utilizing a touch panel as a user control device for mechanical reel assemblies and game play features, the process comprising:

providing a gaming machine assembly having mechanical reels as display devices;

receiving player input using a touch sensor assembly with a substantially transparent touch panel that produces touch data when touched;

providing viewing of the mechanical reels through the touch panel;

receiving and interpreting the touch data from the touch panel utilizing a reel-compatible touch panel controller, wherein the reel-compatible touch panel controller registers the touch data at a level sufficient to support mechanical reel control;

interpreting the touch data with touch panel reel software that utilizes the touch data received from the touch panel controller at a level sufficient to support mechanical reel control; ~~and~~

communicating the touch data from the touch panel reel software to a reel controller that manipulates the mechanical reels in accordance with the touch data received, and

wherein the touch panel enables user-control of reel spin direction and reel spin speed in correspondence with the direction and speed in which the touch panel is touched by a user.

44. (Original) The process of Claim 43, wherein the gaming machine assembly comprises a reel spinning game machine having at least one reel.

45. (Previously Presented) The process of Claim 44, wherein the system enables selectively starting and stopping the reels by touching the touch panel at a particular point.

46. (Previously Presented) The process of Claim 44, wherein the system enables activating different game features by using distinct types, directions, and durations of touches.

47. (Previously Presented) The process of Claim 44, wherein the system enables selectively activating features and system controls by touching the touch panel at particular points.

48. (Original) The process of Claim 43, wherein the substantially transparent touch panel is composed of a composite material.

49. (Original) The process of Claim 48, wherein the composite material touch panel comprises a glass material touch panel.

50. (Original) The process of Claim 43, wherein the substantially transparent touch panel is composed of a metallic material.

51. (Original) The process of Claim 43, wherein the touch panel includes a polymeric film.

52. (Original) The process of Claim 43, wherein the touch sensor assembly includes a plurality of transducers that are integrated into the glass.

53. (Original) The process of Claim 52, wherein the transducers are selected from a group consisting of acoustic transducers, infrared transducers, ultrasonic transducers, resistive transducers, and capacitive transducers.

54. (Original) The process of Claim 52, further comprising a bezel to protect the transducers.

55. (Original) The process of Claim 43, further comprising a generic device controller unit operatively associated with a reel assembly for controlling the reel assembly.

56. (Original) The process of Claim 55, wherein the generic device controller unit runs reel controller firmware.

57. (Original) The process of Claim 55, further comprising a microprocessor connected to the generic device controller unit.

58. (Original) The process of Claim 43, wherein touch panel software includes driver software.

59. (Original) The process of Claim 43, wherein the driver software is capable of controlling and interpreting data from the touch panel controller.

60. (Original) The process of Claim 43, wherein the touch panel software includes application software.

61. (Original) The process of Claim 60, wherein a microprocessor runs the application software.

62. (Original) The process of Claim 43, further comprising a multi-tasking embedded control system which controls both periphery devices and application software.

63. (Currently Amended) A process for enabling enhanced mechanical reel gaming utilizing multiple touch panels to provide user control for mechanical reel assemblies and game play features, the process comprising:

providing a control panel assembly;

receiving player input using a plurality of touch sensor assemblies with a-substantially transparent touch panels that produce touch data when touched;

providing viewing of the mechanical reels through the touch panels;

receiving and interpreting the touch data from the touch panel utilizing at least one reel-compatible touch panel controller, wherein the reel-compatible touch panel controller registers the touch data at a level sufficient to support mechanical reel control;

interpreting the touch data with touch panel reel software that utilizes the touch data received from the touch panel controller at a level sufficient to support mechanical reel control;
and

communicating the touch data from the touch panel reel software to a reel controller that manipulates the mechanical reels in accordance with the touch data received, and

wherein the touch panel enables user-control of reel spin direction and reel spin speed in correspondence with the direction and speed in which the touch panel is touched by a user.

64. (Currently Amended) A computer program product readable by a computing system and encoding a computer program of instructions for executing a computer process for enabling enhanced mechanical reel gaming utilizing a touch panel as a user control device for mechanical reel assemblies and game play features, said computer process comprising:

receiving touch data produced when a touch sensor assembly with a substantially transparent touch panel is touched, wherein the substantially transparent touch panel provides viewing of the mechanical reel assemblies through the touch panel;

receiving and interpreting the touch data from the touch panel utilizing a reel-compatible touch panel controller, wherein the reel-compatible touch panel controller registers the touch data at a level sufficient to support mechanical reel control;

interpreting the touch data with touch panel reel software that utilizes the touch data received from the touch panel controller at a level sufficient to support mechanical reel control;
and

communicating the touch data from the touch panel reel software to a reel controller that manipulates the mechanical reels in accordance with the touch data received, and

wherein the touch panel enables user-control of reel spin direction and reel spin speed in correspondence with the direction and speed in which the touch panel is touched by a user.

65. (Original) The computer program product of Claim 64, wherein the gaming machine assembly comprises a reel spinning game machine having at least one reel.

66. (Previously Presented) The computer program product of Claim 65, wherein the system enables selectively starting and stopping the reels by touching the touch panel at a particular point.

67. (Previously Presented) The computer program product of Claim 65, wherein the system enables activating different game features by using distinct types, directions, and durations of touches.

68. (Previously Presented) The computer program product of Claim 65, wherein the system enables selectively activating features and system controls by touching the touch panel at particular points.

69. (Original) The computer program product of Claim 64, wherein the substantially transparent touch panel is composed of a composite material.

70. (Original) The computer program product of Claim 69, wherein the composite material touch panel comprises a glass material touch panel.

71. (Original) The computer program product of Claim 64, wherein the substantially transparent touch panel is composed of a metallic material.

72. (Original) The computer program product of Claim 64, wherein the touch panel includes a polymeric film.

73. (Original) The computer program product of Claim 64, wherein the touch sensor assembly includes a plurality of transducers that are integrated into the glass.

74. (Original) The computer program product of Claim 73, wherein the transducers are selected from a group consisting of acoustic transducers, infrared transducers, ultrasonic transducers, resistive transducers, and capacitive transducers.

75. (Original) The computer program product of Claim 73, further comprising a bezel to protect the transducers.

76. (Original) The computer program product of Claim 64, further comprising a generic device controller unit operatively associated with a reel assembly for controlling the reel assembly.

77. (Original) The computer program product of Claim 76, wherein the generic device controller unit runs reel controller firmware.

78. (Original) The computer program product of Claim 76, further comprising a microprocessor connected to the generic device controller unit.

79. (Original) The computer program product of Claim 64, wherein touch panel software includes driver software.

80. (Original) The computer program product of Claim 64, wherein the driver software is capable of controlling and interpreting data from the touch panel controller.

81. (Original) The computer program product of Claim 64, wherein the touch panel software includes application software.

82. (Original) The computer program product of Claim 81, wherein a microprocessor runs the application software.

83. (Original) The computer program product of Claim 64, further comprising a multi-tasking embedded control system which controls both periphery devices and application software.

84. (Currently Amended) A computer program product readable by a computing system and encoding a computer program of instructions for executing a computer process for enabling enhanced mechanical reel gaming utilizing multiple touch panels to provide user control for mechanical reel assemblies and game play features, said computer process comprising:

receiving touch data produced when touch sensor assemblies with substantially transparent touch panels are touched, wherein the substantially transparent touch panels provide viewing of the mechanical reel assemblies through the touch panels;

receiving and interpreting the touch data from the touch panels utilizing a reel-compatible touch panel controller, wherein the reel-compatible touch panel controller registers the touch data at a level sufficient to support mechanical reel control;

interpreting the touch data with touch panel reel software that utilizes the touch data received from the touch panel controller at a level sufficient to support mechanical reel control; ~~and~~

communicating the touch data from the touch panel reel software to a reel controller that manipulates the mechanical reels in accordance with the touch data received, and

wherein the touch panel enables user-control of reel spin direction and reel spin speed in correspondence with the direction and speed in which the touch panel is touched by a user.

85. (Previously Presented) The system of Claim 1, wherein the game play features that are controlled by touch data include selecting denomination of game play.

86. (Previously Presented) The system of Claim 1, wherein the game play features that are controlled by touch data include selecting one reel for special game play.

87. (Previously Presented) The system of Claim 1, wherein the game play features that are controlled by touch data include requesting service.

88. (Newly Added) The system of Claim 1, wherein a threshold touch speed is required to initiate reel movement.

89. (Newly Added) The system of Claim 1, wherein touch speed correlates to a plurality of distinct incremental levels of reel speed.